PIEZOELECTRIC CERAMIC ACTUATOR DRIVE CIRCUIT

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Applicant:

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- International:

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- european:

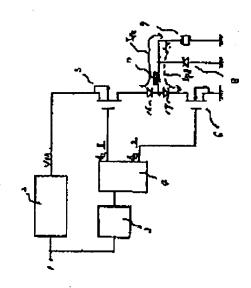
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Abstract of JP4351200

PURPOSE:To realize the piezoelectric actuator drive circuit for repetitive operation with high efficiency. CONSTITUTION: A reactor 7 is connected in series with a ceramic actuator 9 and its inductance is set so that the resonance frequency of a series resonance circuit is higher than the drive frequency. Moreover, charge/discharge switching elements 5, 6 are interrupted when a current flowing to the ceramic actuator 9 is zero and a diode 8 is connected in parallel with the ceramic actuator 9 to clamp a negative voltage to zero. The energy consumption at charge/ discharge is halved by connecting a reactor 7 to the elements and the allowable current of the switching elements is reduced and the positive voltage is applied to the ceramic actuator 9 by connecting a diode to the elements, the efficient drive circuit is realized.



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